

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method of collecting and testing data from a plurality of patient point of care locations, the method comprising:

receiving by a central device sample data from at least one sample testing device at a patient point of care location, said sample testing device adapted to engage a sample cartridge and provide said sample data, said central device adapted to maintain at least one database;

receiving by the central device cartridge identifier information from said sample testing device;

tagging said received sample data with a patient identifier label information, said patient identifier label information communicated to said central device via a data input device; and

updating said database by the central device, said updating based upon at least one of said received sample data, cartridge identifier information and patient identifier information, and providing said database to a network server; and

controlling said central device to communicate new test data as at least one data packet communicated from said central device via a handheld analytical device to said patient identifier label, updating information stored in a patient identifier label with new test data.

2. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, further comprising:

controlling said sample testing device to communicate said sample data to said central device as at least one data packet communicated from said sample testing device via a first wireless communication module.

3. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 2, further comprising:

controlling said sample testing device to communicate said sample data in a multiplexed format, said format including at least one of a time-division multiple access (TDMA) format, code-division multiple access (CDMA) format, and frequency-division multiple access (FDMA) format.

4. (Currently Amended) A method of collecting and testing data from a plurality of patient point of care locations as claimed in ~~claim 1~~claim 2, further comprising:

controlling said central device to receive said sample data from a plurality of sample testing devices simultaneously via a second wireless communication module.

5. (Currently Amended) A method of collecting and testing data from a plurality of patient point of care locations as claimed in ~~claim 1~~claim 2, further comprising:

controlling said central device to communicate data to said sample testing device as at least one data packet communicated from said central device via a second wireless communication module.

6. (Cancelled)

7. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 6, wherein said patient identifier information label is a radio frequency identification label.

8. (Previously Presented) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said data input device is at least one of a bar code reader and a radio frequency identification reader.

9. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said data input device is incorporated with said sample testing device.

10. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said data input device is incorporated with said central device.

11. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said sample data comprises pH, pCO₂, pO₂, pCl, pNO₃, Na⁺, Ca⁺⁺, K⁺, hematocrit and glucose levels in said sample.

12. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said testing device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said testing device located within a contamination field about a patient at a patient point of care location.

13. (Original) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said central device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said central device located beyond a contamination field about a patient at a patient point of care location.

14. (Currently Amended) A system, adapted to collect and test data at a patient point of care location from a point located beyond a contamination radius about a patient using modular components to create a point of care network, the system comprising:

a sample cartridge, adapted to engage a sample testing device for testing a collected sample at a patient point of care location, said sample cartridge including a cartridge identifier mechanism, adapted to provide cartridge identifier information;

a patient identifier label, adapted to provide patient identifier information; and

a central device, adapted to receive sample data from said sample testing device at a patient point of care location, said central device being further adapted to maintain at least one database and to update said database based upon at least one of said cartridge identifier information, patient identifier information, and received sample data, and to provide said database to a network server; and

handheld analytical device adapted to transmit new test data from said central device to said sample testing device, said sample testing device operable to update information stored in a patient identifier label with new test data.

15. (Original) A system as claimed in claim 14, wherein:
said central device is further adapted to tag said received sample data with said patient identifier label information.

16. (Original) A system as claimed in claim 14, wherein:
said sample testing device is adapted to communicate said sample data to said central device as at least one data packet communicated from said sample testing device via a first wireless communication module.

17. (Original) A system as claimed in claim 15, wherein:
said sample testing device is adapted to communicate said sample data in a multiplexed format, said format including at least one of a time-division multiple access (TDMA) format, code-division multiple access (CDMA) format, and frequency-division multiple access (FDMA) format.

18. (Original) A system as claimed in claim 14, wherein:
said central device is adapted to receive said sample data from a plurality of sample testing devices simultaneously via a second wireless communication module.

19. (Previously Presented) A system as claimed in claim 14, wherein:
said central device is adapted to communicate data to said sample testing device
as at least one data packet communicated from said central device via a second wireless
communication module.

20. (Cancelled)

21. (Original) A system as claimed in claim 14, wherein said patient
identifier information label is a radio frequency identification label.

22. (Previously Presented) A system as claimed in claim 14, further
comprising a data input device for communicating the patient identifier information to said
central device, wherein the data input device is at least one of a bar code reader and a radio
frequency identification reader.

23. (Original) A system as claimed in claim 14, wherein said data input
device is incorporated with said sample testing device.

24. (Original) A system as claimed in claim 14, wherein said data input
device is incorporated with said central device.

25. (Original) A system as claimed in claim 14, wherein said sample data
comprises pH, pCO₂, pO₂, pCl, pNO₃, Na⁺, Ca⁺⁺, K⁺, hematocrit and glucose levels in said
sample.

26. (Original) A system as claimed in claim 14, wherein said testing
device comprises at least one of a hand-held analytical device and stand-alone computer
workstation, said testing device located within a contamination field about a patient at a patient
point of care location.

27. (Original) A system as claimed in claim 14, wherein said central device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said central device located beyond a contamination field about a patient at a patient point of care location.

28. (Previously Presented) A method of collecting and testing data from a plurality of patient point of care locations as claimed in claim 1, wherein said testing device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said testing device located within a contamination field about a patient at a patient point of care location, wherein said central device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said central device located beyond the contamination field about the patient.

29. (Previously Presented) A system as claimed in claim 14, wherein said testing device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said testing device located within a contamination field about a patient at a patient point of care location, wherein said central device comprises at least one of a hand-held analytical device and stand-alone computer workstation, said central device located beyond the contamination field about the patient.